

Executive Summary

In this era of globalization, rapid technological change, and significant shift in wealth creation to Asian economies, the United States must remain at the forefront of science and technology in order to maintain its national prosperity and world leadership. From Europe to Asia to Canada, nations recognize the important link between S&T-based innovation, economic growth and international competitiveness. Our competitors are making ever increasing investments in basic and applied science and pursuing strategies of government-industry-academic collaboration to stimulate technology-based growth, trade and investment. As part of this strategy, nations take full advantage of the opportunities presented by the U.S. system of open access to S&T knowledge. In fact an important focus of some nations is to target the acquisition of U.S. S&T in key industries to supplement their own efforts to foster innovation, rapid commercialization, and value-added production. In this way, these nations seek to increase both their international and U.S. market share.

To compete effectively in global markets and to hold their own in the domestic market, U.S. companies and researchers similarly need to track and remain current with foreign science and technology developments. This is critical as U.S. corporations increasingly partner with foreign firms as a way of addressing new opportunities while sharing technical strengths and financial resources.

However, very few nations provide as open access to S&T as the United States. American companies may find that their efforts alone are not fully effective when it comes to monitoring foreign S&T, especially regarding opportunities for technology transfer. To address this need, additional resources are available through the U.S. government and various private sector organizations that monitor and acquire foreign science and technology on behalf of U.S. interests.

The area of agriculture is a case in point. Some 70 percent of all agricultural research is conducted outside the United States. In order for U.S. agriculture interests to enhance market access, build new markets, and maintain global competitiveness, it is essential that they monitor and acquire the science and technology of competitors. To augment private sector efforts, the U.S. Department of Agriculture conducts international research projects, international training and technical assistance, scientific and technical exchanges, global market surveillance, and liaison with international organizations, among other initiatives. To a considerable extent, U.S. agriculture's world leadership position is due to its ability to learn from and cooperate with foreign counterparts in areas of high priority.

The importance of continually re-evaluating the global market implications of foreign science and technology applies to the whole spectrum of U.S. industry and research activities. Forestry, high tech industries, medical equipment, development and commercialization of defense technology, management of the environment, development of energy resources, transportation systems, and space exploration are ready examples.

To ensure that no resources are overlooked nor opportunities ignored, this *Foreign Science & Technology Information Sources* was developed as a guide to the foreign science and technology services and expertise available from the U.S. federal government and select private sector organizations. For the first time in one source, it describes the mandate, activities, products and key contacts of nine U.S. Cabinet departments (covering 60 distinct organizations), six U.S. government agencies (covering nine distinct organizations, including those affiliated with executive and legislative branches), seven U.S. military service organizations, and six select private sector organizations -- 80 distinct organizations in total. All of these organizations to some

degree monitor, collect, disseminate or conduct analysis on information involving foreign science and technology related to their mission mandates. Many of the mission mandates include as well a specialized international focus, such as, monitoring of specific technology sectors, providing technical assistance, negotiation and management of international technology exchange agreements or treaties involving science and technology. Two organizations in particular worth noting for their comprehensive services and expertise are: 1) the Department of Commerce's National Technical Information Service with its extensive bibliographic database of scientific, technical, engineering, and business information, and 2) the Department of State's Overseas Environment, Science and Technology Officers who implement U.S. Government international science and technology programs at foreign posts around the world.

It is the hope of the two sponsoring departments -- the Department of Commerce's Technology Administration and the Department of State's Bureau of Oceans and International Environmental and Scientific Affairs -- that by drawing upon the resources identified in the *Foreign Science & Technology Information Sources* U.S. companies and researchers will be able to widen their scope of opportunities for international licensing, technology trade events, developing intellectual property, potential R&D partnerships and joint ventures, as well as better anticipate the commercial launch of innovative technologies. For those companies with a particular geographic or country focus, various U.S. federal and private sector organizations can provide background information and introductions to local businesses, universities, research labs and institutes, and individual scientists. Expertise is also available for helping overcome cultural, language and political barriers to accessing foreign science and technology resources. Finally, recognizing that the face of government is continuously changing, the *Foreign Science & Technology Information Sources* 's Appendix lists Internet HomePages and the major legislation, programs and activities of the participating organizations.